

From: [PETERSON Jenn L](#)
To: [Eric Blischke/R10/USEPA/US@EPA](#)
Subject: RE: Benthic Risk Comments
Date: 09/27/2010 08:36 AM

Hi Eric,

I will be out in the field today, but I talked with Mike and he is going to try and quickly summarize some of the issues for your comments.

Jennifer

-----Original Message-----

From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Friday, September 24, 2010 11:23 AM
To: Shephard.Burt@epamail.epa.gov; PETERSON Jenn L; POULSEN Mike; AEBBETS@stratusconsulting.com; Bob Dexter; JMalek@parametrix.com; jay.field@noaa.gov
Cc: Humphrey.Chip@epamail.epa.gov
Subject: Benthic Risk Comments

Attached is the latest version of the benthic risk comments.

I am intending to send these comments out by COB on Monday, September 27th, 2010.

Please provide me with any edits or additional comments by mid-day on Monday. I have summarized some of the key elements of the comments below. Please contact me with any questions.

Thanks, Eric

Foundation of Comments:

Comments are based on a review of Section 6 of the Draft BERA, the Benthic Toxicity Reanalysis Tech Memo, and the Site-Specific SQGs based on Individual Endpoints

Comments are in consideration of agreements between EPA and the LWG over the life of the project (too numerous to list here), the EPA BERA Problem Formulation (February 2008), An Evaluation of the Approach for Assessing Risks to the Benthic Invertebrate Community at the Portland Harbor Superfund Site (MacDonald Landrum, September 2008) and the outcomes of our benthic meeting that took place in January 2010.

Key Elements of Comments:

Sediment Bioassays: Risk assessment must identify all level 1, 2 and 3 (low, moderate and high) hits based on the EPA 2009 reference envelop approach. All four endpoints must be considered. Any concerns that the LWG has regarding the Hyalella biomass endpoint may be presented in the uncertainty analysis. The appropriate reference envelop and hit designation must be incorporated into the predictive models.

FPM: Any fatal flaws associated with the current derivation of the LRM must be identified with specificity in our comments. Examples include the use of individual rather than pooled endpoints, the appropriate statistical tests and other criteria for identifying chemicals to be included in the model and use of the appropriate hit/no-hit designation in model development. These comments will be incorporated into a revised FPM.

LRM: The updated model will be provided to the LWG along with a description of the model and maps of model output. We will reiterate that the model can not be eliminated as an LOE consistent with the PF. We will also recommend to the LWG that the LRM be used "as is."

Generic SQGs and PEC Quotient: As with the LRM, these LOEs must not be eliminated from consideration consistent with the PF.

TZW: TZW must be included as an LOE for evaluating risks to the benthic community (note, this comment was provided to the LWG previously as a directed comment and has been resolved).

Reliability Analyses: Additional reliability analyses must be performed. These reliability analyses may be used in the uncertainty analysis to inform risk managers about the relative strength and weaknesses of each LOE but not to eliminate LOE from consideration.

Risk Management Considerations:

As stated in our April 21, 2010 PRG letter, benthic toxicity testing is considered the primary LOE for evaluating risks to the benthic community.

The application of predictive models and SQGs is fundamentally a risk management determination that allows managers to develop chemical specific cleanup numbers. However, these models were identified as LOEs in the problem formulation and need to be retained as such.

The reliability evaluation of the predictive models and SQG based LOEs - as well as any other analyses relevant to protection of the benthic community may be used to develop cleanup levels that will allow us to meet the RAO of protecting the benthic community.

We will be meeting with the LWG on September 29th (11:00 am - 2:00 pm; Perkins Coie in Portland) to discuss the development of cleanup levels for protection of the benthic community in the PH FS.

(See attached file: BenthicRiskEvaluationComments092410.doc)